

ABSTRACT OF THE DISCLOSURE

On top of a silicon substrate, a polyimide film with a thickness of 10 μm is formed. On top of this, a magnetic thin film that is a polyimide film containing Fe fine particles and that has a thickness of 20 μm is formed. On top of this magnetic thin film, a patterned Ti/Au film and a Ti/Au connection conductor are formed. On top of this, a polyimide film with a thickness of 10 μm , and a Cu coil with a height 35 μm , width 90 μm , space 25 μm , and a polyimide layer that fills the spaces in the Cu coil are formed. On top of this, via a polyimide film with a thickness of 10 μm , a magnetic thin film that is a polyimide film containing Fe particles and that has a thickness of 20 μm is formed. This thin film inductor has a small alternating current resistance. The present invention provides a magnetic thin film that is well suited for mass production, can be manufactured easily, can be made into a thick film, has soft magnetic qualities, and is inexpensive. The present invention also provides a magnetic component that uses this magnetic thin film, manufacturing methods for these, and a power conversion device.